

IN THE CLAIMS

1. (Currently Amended) A method of treating a semiconductor device with a focused ion beam, the device being produced on the surface of a silicon-on-insulator substrate, the method comprising:

causing an insulator layer of a substrate which is part of a semiconductor device to break down by subjecting a second metal line to a focused ion beam until breakdown of the insulator layer occurs;

wherein the insulator layer is located beneath an active zone of a semiconductor structure and wherein the insulator layer is electrically isolated from the rest of the semiconductor device; and

wherein the active zone is electrically connected to the second defined-metal line;

forming an electrical connection between a first metal line and the second metal line, wherein the first defined-metal line is electrically connected to an electrical ground of the semiconductor device;

treating the semiconductor device with the focused ion beam; and

breaking the electrical connection between the first metal line and the second metal line.

2. (Original) The method according to claim 1, wherein the causing an insulator layer of a substrate which is part of a semiconductor device to break down includes using the focused ion beam with a given polarity of ions, wherein the given polarity of ions is identical to a polarity of a doping for the active zone.

3. (Original) The method according to claim 1, wherein the forming an electrical connection between a first metal line and the second metal line includes forming the electrical connection by depositing a metal bridge between the first metal line and the second metal line by a focused ion beam treatment.

4. (Original) The method according to claim 2, wherein the forming an electrical connection between a first metal line and the second metal line includes forming the electrical connection by depositing a metal bridge between the first metal line and the second metal line by a focused ion beam treatment.
5. (Original) The method according to claim 3, wherein the breaking the electrical connection between the first metal line and the second metal line includes breaking the electrical connection by removing at least part of the metal bridge deposited by means of a focused ion beam treatment.
6. (Original) The method according to claim 4, wherein the breaking the electrical connection between the first metal line and the second metal line includes breaking the electrical connection by removing at least part of the metal bridge deposited by means of a suitable focused ion beam treatment.
7. (Original) The method according to claim 1, wherein, before the causing an insulator layer of a substrate which is part of a semiconductor device to break down, the second metal line is exposed by removing a passivation layer, by means of a focused ion beam treatment.
8. (Original) The method according to claim 7, wherein, before the forming an electrical connection between a first metal line and the second metal line, the first metal line is exposed by removing a passivation layer by means of a suitable focused ion beam treatment, through a mask having a depassivation window exposing the second exposed metal line.

Claims 9 - 17 (Cancelled)

18. (New) A method of treating a semiconductor device with a focused ion beam, the device being produced on a surface of a silicon-on-insulator substrate, the method comprising:

causing an insulator layer of a substrate which is part of a semiconductor device to break down by subjecting a second metal line to a focused ion beam until breakdown of the insulator layer occurs;

wherein the insulator layer is located beneath an active zone of a semiconductor structure and wherein the insulator layer is electrically isolated from the rest of the semiconductor device; and

wherein the active zone is electrically connected to the second metal line;

forming an electrical connection between a first metal line and the second metal line by depositing a metal bridge therebetween, and wherein the first metal line is electrically connected to an electrical ground of the semiconductor device;

treating the semiconductor device with the focused ion beam; and

breaking the electrical connection between the first metal line and the second metal line by removing at least part of the metal bridge through use of a focused ion beam treatment.

19. (New) The method according to claim 18, wherein the causing an insulator layer of a substrate which is part of a semiconductor device to break down includes using the focused ion beam with a given polarity of ions, wherein the given polarity of ions is identical to a polarity of a doping for the active zone.

20. (New) The method according to claim 18, wherein, before the causing an insulator layer of a substrate which is part of a semiconductor device to break down, the second metal line is exposed by removing a passivation layer, by means of a focused ion beam treatment.

21. (New) The method according to claim 20, wherein, before the forming an electrical connection between a first metal line and the second metal line, the first metal line is exposed by removing a passivation layer by means of a suitable focused ion beam treatment, through a mask having a depassivation window exposing the second exposed metal line.